

THE PENDING CLAIMS:

1. (Previously Presented) An electrochemical plating cell, comprising:
a fluid basin configured to contain a plating solution;
an anode fluid volume positioned in a lower portion of the fluid basin;
a cathode fluid volume positioned in an upper portion of the fluid basin;
an ionic membrane positioned to separate the anode fluid volume from the cathode fluid volume;
a plating electrode centrally positioned in the anode fluid volume; and
a deplating electrode positioned radially outward from the plating electrode in the anode fluid volume, wherein the plating electrode comprises a disk member having a plurality of parallel slots formed therethrough, the plurality of parallel slots comprises a plurality of longer segments and a plurality of shorter segments.
2. (Original) The plating cell of claim 1, wherein the plating electrode comprises an insoluble anode.
3. (Original) The plating cell of claim 2, wherein the insoluble anode comprises a platinum electrode surface.
4. (Previously Presented) The plating cell of claim 2, wherein the deplating electrode comprises an annular platinum coated electrode positioned to circumscribe the insoluble anode and in substantially the same plane as the insoluble anode.
5. (Original) The plating cell of claim 1, further comprising an insulative spacer positioned between the plating electrode and the deplating electrode.
6. (Original) The plating cell of claim 1, further comprising a power supply in electrical communication with the deplating electrode and the plating electrode, the power supply being configured to cathodically bias the deplating electrode in a deplating configuration and anodically bias the plating electrode in a plating configuration.

7. (Original) The plating cell of claim 1, further comprising a power supply in electrical communication with the deplating electrode and the plating electrode, the power supply being configured to anodically bias the plating electrode in a plating configuration and selectively bias the deplating electrode anodically in the plating configuration and cathodically in a deplating configuration.

8. (Original) The plating cell of claim 1, wherein the plating electrode is copper and the deplating electrode is a platinum coated electrode.

9. (Previously Presented) An electrochemical plating cell, comprising:
an anolyte compartment;
a catholyte compartment positioned in ionic communication with the anolyte compartment via a cationic membrane;
an anode positioned in the anolyte compartment; and
a deplating electrode positioned in the anolyte compartment, wherein the anode is a disk shaped member having a plurality of parallel slots formed therethrough, the plurality of parallel slots comprises a plurality of longer segments and a plurality of shorter segments, and the deplating electrode circumscribes the anode.

10. (Original) The plating cell of claim 9, wherein the anode and the deplating electrode comprise a platinum outer surface.

11. (Previously Presented) The plating cell of claim 10, wherein the anode has a substantially planar upper surface and wherein the deplating electrode is an annular member having a substantially planar upper surface.

12. (Previously Presented) The plating cell of claim 11, wherein the upper surface of the deplating electrode is vertically movable relative to the upper surface of the anode.

13-14. (Cancelled).

15. (Original) The plating cell of claim 11, comprising an electrically insulative spacer positioned between the disk shaped member and the annular member.

16. (Original) The plating cell of claim 9, wherein the anode is in communication with an anodic terminal of a power supply and wherein the deplating electrode is in communication with a cathodic terminal of the power supply.

17. (Original) The plating cell of claim 9, wherein the anode is in communication with an anodic terminal of a power supply and wherein the deplating electrode is selectively in communication with a cathodic terminal of the power supply and the anodic terminal of the power supply.

18 – 21. (Cancelled)